

## NEW MICROSPHERE

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Inventor(s): YOSHIOKA SUMIE; oth rs: 03  
Applicant(s): KOKURITSU EISEI SHIKENJIYOCHEYOU  
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### Abstract

**PURPOSE:** To obtain a microsphere having excellent sustained-release activity of drug and composed of a polymeric substance free from crystal structure by using a bio-compatible polymeric substance easily crystallizable under normal pressure, dissolving the polymeric substance together with a drug in an organic solvent, mixing the solution with an aqueous solution of an emulsifier and distilling out the solvent under reduced pressure under stirring.

**CONSTITUTION:** A bio-compatible polymeric substance liable to crystallize under normal pressure (e.g. poly-L-lactic acid, L-lactic acid-glycolic acid copolymer and poly-beta-hydroxybutyric acid) and a drug are dissolved in an organic solvent. The solution is mixed with an aqueous solution of an emulsifier (e.g. gelatin, PVA or lecithin) and the organic solvent is distilled off from the mixture under stirring under reduced pressure to obtain amorphous microsphere. The sustained release property of the microsphere can be controlled to a desired level by mixing the microsphere with a crystalline microsphere produced by conventional method.

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